THE CENTRAL BANK OF
THE REPUBLIC OF AZERBAIJAN

№3(15)
2013

MONETARY POLICY REVIEW

Q3

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OF THE REPUBLIC OF AZERBAIJAN

The key goal of the review is to address current macroeconomic state analyses and expectations of the Central Bank of the Republic of Azerbaijan (CBA). Another goal of the present review, which is open to the public, is to regularly convey possible impacts of the policy pursued by the CBA on the economy to the public. The review is quarterly disclosed to the public.

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Acronyms

CBA	–	The Central Bank of Azerbaijan
ILO	–	International Labor Organization
IMF	–	International Monetary Fund
FDIs	–	Foreign Direct Investments
SSC	–	The State Statistics Committee
DGCs	–	Developing countries
DDCs	–	Developed countries
OECD	–	The Organization for Economic Cooperation and Development
CPI	–	Consumer Price Index
APPI	–	Agricultural Producer Price Index
SME	–	Small and medium entrepreneurship
NEER	–	Nominal Effective Exchange Rate
OG	–	Output Gap
OPEC	–	Organization of the Petroleum Exporting Countries
REER	–	Real Effective Exchange Rate
RSM	–	Real Sector Monitoring
PPI	–	Producer Price Index
NFES	–	The National Fund for Entrepreneurship Support
GDP	–	Gross Domestic Product
WTO	–	World Trade Organization

EXECUTIVE SUMMARY

The Central Bank of the Republic of Azerbaijan implemented its policy in the nine months of 2013 in the environment of continuing macroeconomic stability and diversification of the economy in the country.

The economy continued to grow and the foreign economic position of the country was favorable in the nine months of the current year. Growth dynamics of the non-oil sector further strengthened. Government's active support for socio-economic growth and infrastructure contributed to economic growth significantly. Strategic foreign exchange reserves of the country kept growing and considerably exceeded the international norm on sufficiency.

In the reporting period the CBA targeted a low single-digit level of inflation, a stable exchange rate of manat and financial stability and sustainability. Average annual inflation made up 2.3% which contributed to real income growth of the population. Inflation was to a considerable extent lower compared to partner countries. The stable exchange rate of manat was the key factor in maintaining a single-digit level of inflation. In the environment of the stability of manat low inflation had a positive impact on international competitiveness of the non-oil economy and export.

I. GLOBAL ECONOMIC PROCESSES AND THE NATIONAL ECONOMY

1.1. Global economic trends

The global economy is witnessing fragile growth trends in the environment of uncertainties. Defining the best policy measures to revive growth and enhance employment remains the most critical challenge. Unemployment and public debt in the DDCs have not yet been resolved. New risks to financial stability are being transformed into a safe environment with effort.

Economic activity remains at low levels in advanced economies. Investor and consumer confidence weakened, and economic activity lowered due to severe problems in reaching a consensus in political discussions to resolve economic issues. Financial and commodity markets' responses to announced macroeconomic numbers were more sensitive, thus triggering market volatility.

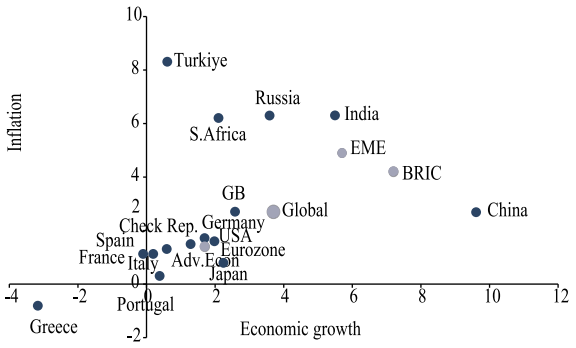
While the US Federal Reserve's temporary suspension of the austerity policy removed pressures in FX markets of DGCs, devaluation risks still remain. Central banks continue accommodative monetary policies. 42 countries decreased, while only 7 countries increased interest rates over the first half of the current year. Some central banks announced that their policy changes would be made depending on an unemployment revival rate.

In the Euro area, institutional reforms in the fiscal sphere are further deepening. New Fiscal Pact is being approved by increasing number of governments. Furthermore, independent fiscal boards have been established in order to strengthen the fiscal discipline.

China's lower growth compared to its traditional sustainable level has had a downward effect on demand in the global commodity markets over the recent period. Global economic growth made up 2.5% over the first half of the current year according to recent estimates. Preliminary estimates suggest global growth of 3.6% over the third quarter, which demonstrates a 0.1 p.p. increase overall compared to the previous quarter. Economies of DDCs grew by 1.5% (with a 0.7 p.p. q.o.q. decrease), and those of DGCs by 5.7% (with a 0.8 p.p. q.o.q. increase).

The U.S. remains the major driver of the global economy. Amid successful fiscal consolidation, the economic activity is backed by the accommodative monetary policy. Japan's economic growth, achieved thanks to recent expansive monetary and supportive fiscal policies, is likely to weaken starting from the next year under the influence of fiscal consolidation. Estimates suggest that 28 countries will have a negative output gap until the year-end.

Chart 1. Global economic growth and inflation, %*



** Initial estimate*

Source: Barclays Capital and IMF

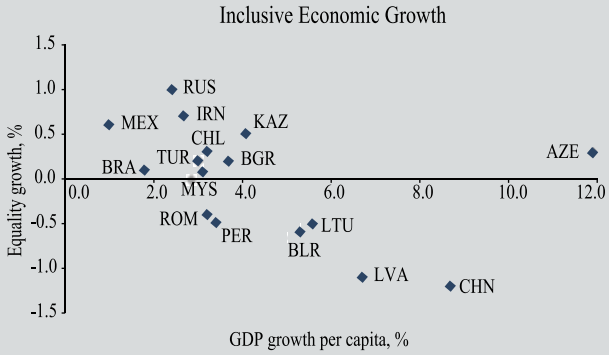
The high unemployment rate is still challenging the global economy. The unemployment

Box 1. Inclusive Economic Growth: Measurement and Determinants

Study findings by the IMF experts have concluded that the inclusive growth indicator should be calculated based upon the sum total of changes in per capita GDP and the equality indicator.

According to results of 1990-2010 the inclusive growth indicator made up 3.5% for Russia, 4.6% for Kazakhstan, 3.2% for Turkey.

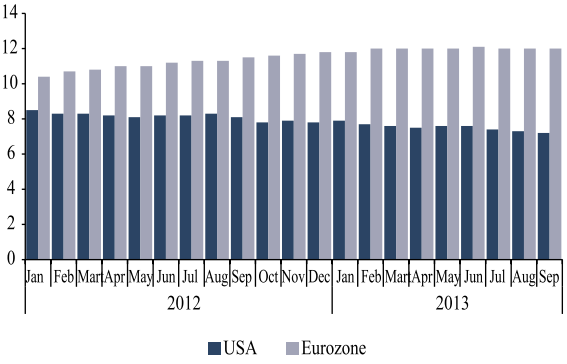
Experts have calculated the effect of various socio-economic indicators on inclusive economic growth. As a result, the following factors that affect inclusive growth in DDCs and DGCs respectively have been identified: the level of education 0.0015 p.p. and 0.397 p.p., trade openness 0.001 p.p. and 0.246 p.p., loan to GDP ratio -0.011 p.p. and - 0.16 p.p., public consumption to GDP ratio -0.004 p.p. and -0.718 p.p., investments to capital ratio 0.004 p.p. and 0.949 p.p., inflation -0.008 p.p. and -0.028 p.p., GDP volatility 0.002 p.p. and -2.126 p.p., the share of IT investments in total capital balance 0.289 p.p. and -0.718 p.p.. Financial openness, direct investments and REER deviation from purchasing power parity (PPP) exchange rate have a trivial effect on inclusive economic growth on both country groups. In DGCs 1 p.p. increase in the quality of infrastructure have an incremental impact of 0.131 p.p. on inclusive economic growth. Goods and services export has a 0.39 p.p. and 0.5 p.p. upward effect on inclusive economic growth respectively.



Source:
Rahul Anand, Saurabh Mishra and Shanaka J. Peiris; « Inclusive Growth: Measurement and Determinants», IMF, May 2013.

rate equals to 7.2% in the U.S., 12% in the Euro area, and 4.1% in Japan and China. Estimates suggest that 470 million new jobs should be created in the next 15 years in order to address global unemployment, 4 times as much compared to the previous 15 years.

Chart 2. Unemployment level in advanced economies, monthly, %



Source: bea.gov and Euro Stat

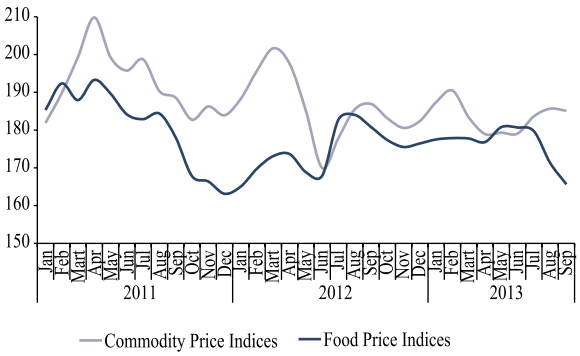
Uncertainties in the global economy also manifest themselves in the global trade dynamics. The IMF forecasts the global trade to grow by 2.9% as of the year-end (y.o.y increase being 0.2 p.p.). The lower growth rate primarily stems from decline in global demand.

Chart 3. Global import-export operations, USD billion

Source: WTO

In the environment of the existing global conjuncture, the food price index declines. While the CPI increased by 1.5% as of end-quarter against the early year, the food price index decreased by 6.1%.

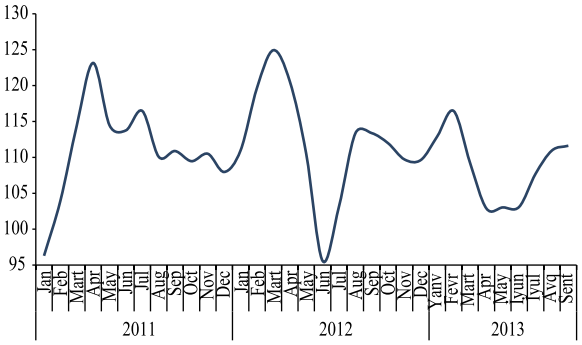
Chart 4. Commodity - Food price indices (2005=100)



Source: IMF

Relatively high economic growth in the U.S. contributed to the oil market demand positively, thus resulting in a slight rise in oil prices. The Brent oil price was USD108.7 over the past 9 months, 3.3% lower compared to the relevant period of the previous year.

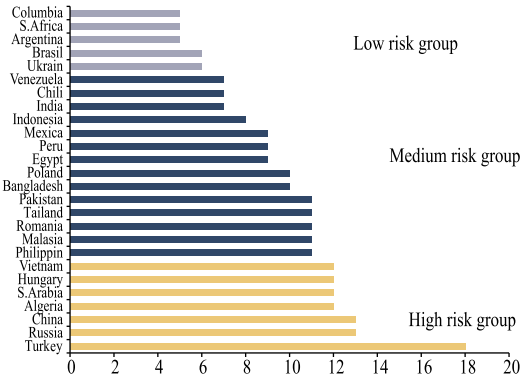
Chart 5. Brent oil price, in USD



Source: IMF

The possibility that the Federal Reserve will tighten its monetary policy accelerated global capital outflows from DGCs to DDCs over Q2 of the current year. High capital flows exerted devaluation pressures on national currencies of DGCs, primarily on portfolio investments. Out of DGCs, capital flows stem chiefly from high risk zone countries (with large current account balance deficit and high level of external debt) on the basis of which DGCs have been classified according to the risk level.

Chart 6. Capital-freeze index



Source: The Economist

According to calculations, global FDI flows are likely to increase by 7% and equal to USD1.5 trln. However, FDI flows will most likely not reach the pre-crisis level (USD2 trln.) before 2015. Currently, the U.S. ranks first (23%), and Japan second (7%) on FDIs. The Asia-Pacific ranks first on attraction of FDIs (26%).

The global economic situation affects financial markets as well. While financial market activities of the U.S. and Japan increased continuously from the early year, the Euro area was highly volatile accompanied by significant downswings in Q2. However, the financial market activity in the Euro area increased again over the recent quarter.

Chart 7. Dynamics of global financial indices

Source: Bloomberg

Box 2: Which drivers matter most in food price movements?

The post-2004 food price boom took place in a period when most countries sustained strong economic growth. Growth in low and middle income countries averaged 6.2% during 2005-12, the highest in recent history. Yet, economic growth was only one among numerous causes of the boom. Fiscal expansion along with low interest rates created an environment that favored high food prices. The depreciation of the US dollar also strengthened demand. Other factors include low past investment activity in response to low food prices, investment fund activity by some financial institutions in food and raw materials market, and geopolitical concerns. In the case of agricultural commodities, prices were affected by higher energy costs, adverse weather conditions, the diversion of some food commodities to the production of biofuels, substantial food loss, etc. These conditions led to global food reserves down to levels not seen since 1970. Lastly, export bans by some countries led to creating the conditions for what has been often called a "*perfect storm*[1]".

Relationship between oil and food prices. Estimates suggest that a 10% increase in world oil prices will induce a 2-3% increase in food prices. In total, this correlation stems from a higher share of oil and oil products as a cost item in the cost price of agricultural products compared to industrial products. The share of oil and oil products in the cost price of world industrial products is 2.5%, while for agriculture that indicator equals to 11%.

Which of the above drivers matters most? An econometric model[2] applied to five food commodities (wheat, maize, rice, sunflower, and palm oil) using 1960-2012 statistics data that almost two thirds of the post-2004 food price increases stems from high crude oil prices. The second important driver in price increases is stocks-to-use (S/U) ratio accounting for 15%, followed by exchange rate, accounting for 10%. The remaining 15% reflects other factors. As an example consider wheat. Between 1997-2004 and 2005-2012 (during pre-and post boom periods), wheat prices increased by 81%; the S/U ratio declined by 17%, oil prices increased 216%, and the USD depreciated 12 % against a broad index of currencies. Elasticity ratios estimated for each factor equal to: -0.50 (S/U ratio), 0.28 (crude oil), and –0.86 (exchange rate), respectively. The S/U ratio decline and exchange rate depreciation lead to a rise in demand, and eventually in prices. Therefore, the elasticity ratios are negative. Results of these elasticity ratio estimates and changes of the respective drivers suggest a 10% contribution by a decline in the S/U ratio, 77% contribution by a rise in oil prices and 12% by exchange rate depreciation to wheat price upswings over the period.

Source:
"Global Economic Prospects: assuring growth over the medium term", World Bank, Volume 6, January 2013.

Despite low commodity prices in global markets, devaluation and increased overheating of national currencies in DGCs create more inflationary pressures. As shown in the chart, overheating indices in DDCs are not at high levels; DGCs are more prone to overheating.

[1] As a result, markets go into a panic followed by faster price rises because of speculative demand.
[2] The theoretical rationale for the model can be found in articles by Baffes, Dennis, Borensztein and Reinhart.

Table 1. Economic overheating indices

	Domestic					External			
	Output relative to trend	Output gap	Unem-ployment	Inflation	Summary	Terms of trade	Capital inflows	Current account	Summary
Japan									
Germany									
U.S.									
France									
Turkey									
Russia									
China									

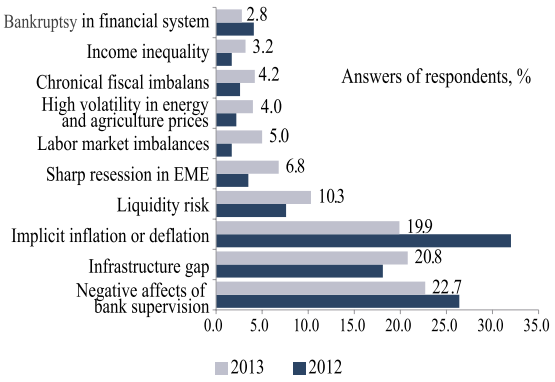
Deviation <0.5 | 0.5<Deviation <1.5 | Deviation≥1.5

** High deviation is a sign of increased overheating.*

Source: IMF

Global economic uncertainties further increased some risks. Difficulties in addressing macroeconomic issues in the Euro area, probability of economic activity failures in Japan, and "hard landing" expectations in China were the main drivers of elevated economic risks. According to World Economic Forum estimates, economic risks will be growth prone in upcoming years.

Chart 8. Global risk sources



Source: World Economic Forum, Global Risks Report 2013

Given the current risks, international organizations have put forward the following key policy challenges.

On DDCs:

- Continue fiscal consolidation and maintain accommodative monetary policy:
  – *Enhance international cooperation to expand the tax base.*
  – *Ensure low interest rate and monetary expansion.*

- Financial stability:
  – *Recapitalize and restructure banks balance sheets.*
  – *Eliminate regulative gaps, regulate the shadow banking system adequately.*

On DGCs:

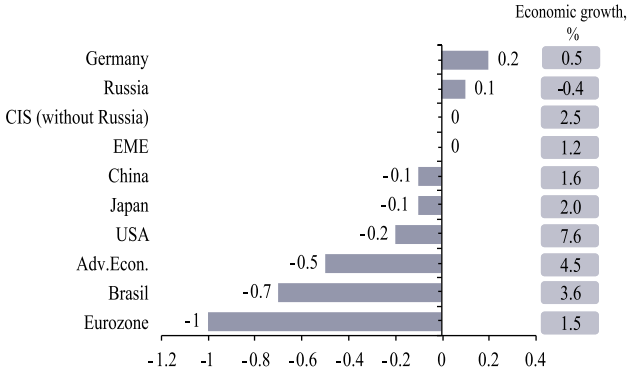
- Macroeconomic policy coordination:
  – *Coordinate budget expenditures with long-term development targets, increase the share of healthcare and educational costs in the budget*
  – *Improve monetary transmission*
  – *Implement necessary structural and institutional reforms supporting economic growth*

- Internal resource mobilization:
  – *Improve economic environment*
  – *Implement structural reforms increasing collection*

- Regulation of capital flows:
  - *Control external indebtedness*
  - *Control asset price bubbles*

The global economic environment over the reporting period suggests a pessimistic outlook for global economic growth prospects in 2013. Given recent global processes, the IMF revised down growth forecasts for the current year in its World Economic Outlook.

Chart 9. Corrections in IMF's global growth forecasts for 2013, compared to July issue, %



Source: IMF

On the backdrop of recent global economic processes the lack of critical economic crisis trends in key trade partners is among the factors that have a positive impact on the foreign economic position of Azerbaijan.

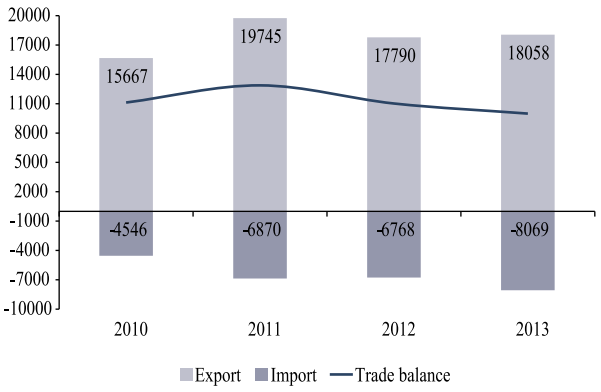
1.2. Macroeconomic processes in Azerbaijan

In the environment of a favorable foreign position and wider internal demand in January-September, 2013 the country economy continued to grow. The non-oil economy was the major source of economic growth and employment.

1.2.1. External sector

As in recent years, in the 9 months of the current year the country's foreign position was favorable. According to the State Customs Committee (SCC), in the first 9 months of 2013 the foreign trade turnover made up USD26.1 billion, of which USD18 billion falls to the share of export and USD8 billion to import.

Chart 10. Trade balance in January-September, USD million

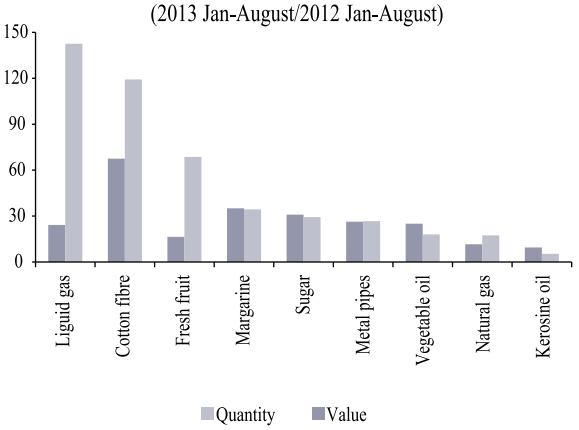


Source: SCC

In January- September y.o.y increase in export was 1.5%, while that of import was 19.2%. Surplus of the foreign trade balance constituted USD10 billion. In total, export exceeded import by 2.2 times as much. Nearly half of export was channeled to EU countries, 5.5% to the CIS and the remainder to other countries. 34% of import relates to the EU, 24% to the CIS and the remainder to other countries. Non-oil products export of USD1.1 billion was 12.3% higher compared to that of January-August, 2012. Per capita non-oil product export increased by USD 12.2 and made up USD 123.4.

The highest monthly level of export and import was observed in February (13% higher than monthly average) and May (35% higher

Chart 11. Quantity and value cahnges of exports by commodities, % (2013 Jan-August/2012 Jan-August)



Source: SSC

Box 3. Export quality in DGCs

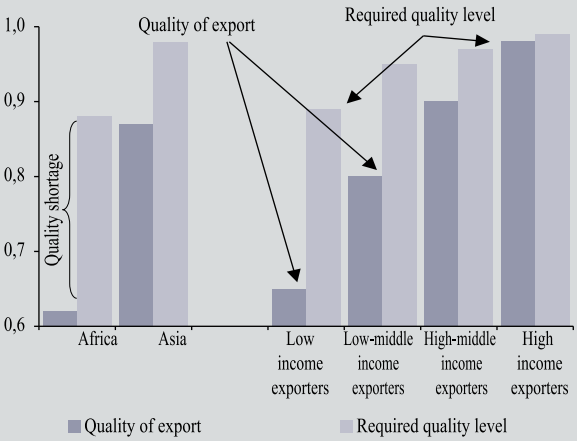
The recent process of trade globalization has led policy-makers to focus on the export-oriented growth model. In order to be part of regional and global supply chains and to rapidly capture DGCs' markets, upgrading product quality is key to success in competitive global trade. The IMF assessed the quality of hundreds of products covering 178 countries over 1962–2010. Economic literature measures export quality using the unit value[3] as the simplest indicator. An increase in unit values is the most successful sign manifesting export quality upgrading. Estimates show that an increase in the unit value is accompanied by per capita GDP growth.

Studies find that between 1980 and 2005 some low-income countries (LICs) produced "sophisticated" products, predominantly produced by DDCs. However, LICs are producing low-quality products; as a result, this has restricted a big boost in GDP per capita. The estimates concluded that diversification and quality upgrading should be viewed as *complementary*.

Study findings suggest that LICs, as usual, export to countries seeking lower-quality products, and they do not meet necessary quality standards. The majority of countries finalize quality upgrading when reached the upper middle-income country level. Quality upgrading is particularly rapid in countries where GDP per capita reaches $10,000. Quality convergence is largely complete by the time GDP per capita reaches $20,000, and enters the stage of stability.

During the assessment both institutional reforms and development of qualified human capital in the country are associated with quality upgrading and a more rapid growth rate. Thus, a one standard deviation increase in institutional quality or in human capital is associated with, respectively, a 0.3 and a 0.2 standard deviations increase in the pace of quality upgrading.

Regional comparision of export quality



Substantial differences have been found out in the pace of quality assessment on different country groups. Thus, at the regional level, product quality in Africa and South Asia is lower, and has been growing more slowly, than in East Asia. Malaysia and China have already reached the top position within existing export sectors. These countries may now make extra profits and upgrade quality through horizontal diversification (production of various quality). However, other countries, such as Tanzania or Vietnam, need quality-upgrading within existing sectors rather than horizontal diversification.

Source:

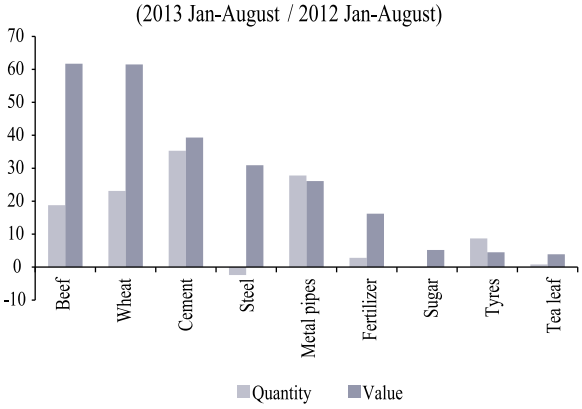
"Export Quality in Developing Countries" Christian Henn, Chris Papageorgiou, and Nikola Spatafora. May 2013.

[3] Unit value – the value of exported product divided by the product type.

than monthly average), respectively. The lowest monthly level of export and import was observed in June (25% lower than monthly average) and January (43% lower than monthly average), respectively. There were observed high growth rates in the sectors of export like cotton, metal pipes, margarine, vegetable oils, sugar and etc.

The import of beef, cement, wheat, metal, machinery and equipment, tea, etc. increased. The share of food products in the structure of import was 10%, which fell up to 0.3% over the quarter. In total, decline in import of some food products indicates domestic production growth. Thus, self-sufficiency level on most agricultural and food products is likely to rise as of the end-year. Even the self-sufficiency level on some products (water-melon and vegetable crops, fruits and berries) is expected to be over 100%, thus making the country a net exporter.[4]

Chart 12. Quantity and value cahnges of imports by commodities, % (2013 Jan-August / 2012 Jan-August)



Source: SSC

Import prices exceeded export prices slightly, but with no effect on domestic inflation. Note that, an increased domestic production potential had a crucial role in maintaining domestic prices unchanged.

According to the IMF, as of the end of 2013 surplus of the current accounts balance will make up 13% of GDP. The country is the leader in the CIS and takes one of the most leading positions among the DGCs in terms of the given indicator. The Fund projects huge surplus to continue in a medium-run.

Besides export, dynamics of remittances and capital flows from abroad also had an upward effect on FX flows into the country. According to the most preliminary data, the size of remittances inflow was USD1.2 billion over the period.

According to the SSC, in January-September foreign investments to the country economy rose more than 66% and constituted USD4.3 billion.

As shown in the chart below, in the first 9 months of the current year strategic FX reserves of the country rose by USD3.3 billion or 7% and constituted USD49.4 billion, sufficient for three-year import of goods and services. At the same time, strategic FX reserves exceed external debt about 9 times as much.

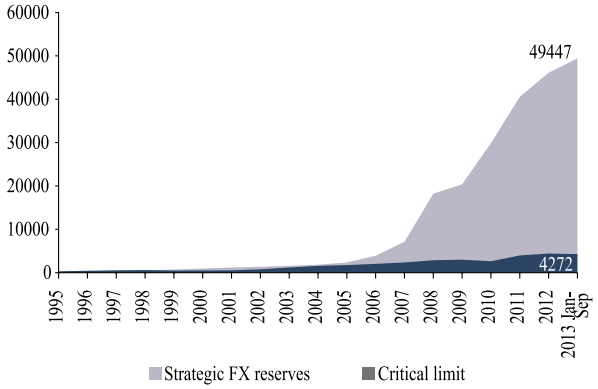
Table 2. Price indices of import – export commodities, % (Jan – August, 2013 vs. Jan – August, 2012)

	Import commodities	Export commodities
Overall index	101.7	94.4
Processing phases		
Investment commodities	100.9	99.5
Intermediate commodities	102.3	92.9
Energy commodities	98.5	90.9
Other interim commodities	102.3	99.2
Consumer goods	100.2	99.6
Non-durables	101.4	99.0
Durables	98.7	105.7
Commodities of double use	101.1	113.4
Other commodities	101.2	97.5

Source: SSC

[4] From the speech by Mr. President Ilham Aliyev in the conference on the fourth year finals of execution of the State Program on socio-economic development of regions of the Republic of Azerbaijan for 2009-2013

Chart 13. Sufficiency of strategic FX reserves, USD million



Source: CBA

CBA's FX reserves increased by 13% and made USD13.3 billion, sufficient for nine-month import of goods and services.

Chart 14. Ratio of strategic FX reserves to GDP, %

Source: CBA

Currently, the strategic FX reserves to GDP ratio approximates 70%. Azerbaijan is on the top 20 in terms of this indicator. Overall, a high growth rate of strategic FX reserves is the factor that reduces vulnerability of the country economy to possible foreign shocks and shapes a strong macroeconomic buffer, as a result of which, the country's Net International Investment Position is favorable, i.e. the country is a net creditor.

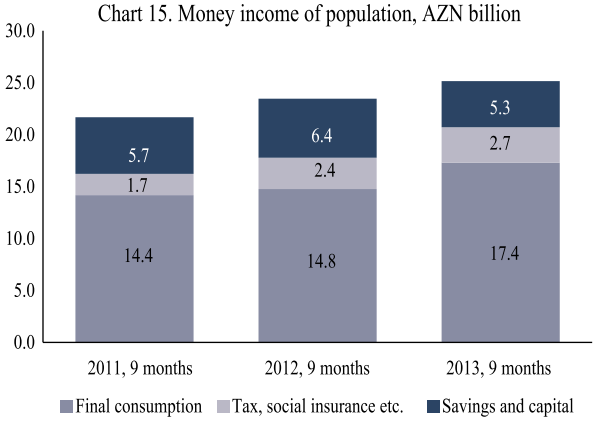
1.2.2. Aggregate demand

In the first 9 months of 2013 all components of the aggregate demand, including final consumption expenditures, investments and public expenditures positively contributed to economic growth.

Final consumption expenditures. Over the reporting period y.o.y. increase in money income of the population was 7.6% in nominal terms, and 5.3% in real terms. Per capita nominal money income of the population increased by 6.2% and real money income by 3.9%.

In the first 9 months of the current year total consumer activity was high owing to increase in average monthly salary, the number of population engaged in the economic sector and the size of consumer loans of the population. The share of final consumption expenditures in the structure of money income of the population remained high (Chart 15). Y.o.y increase in consumption expenditures made up 17.6% (9 months of 2012 - 2.7%).

Chart 15. Money income of population, AZN billion

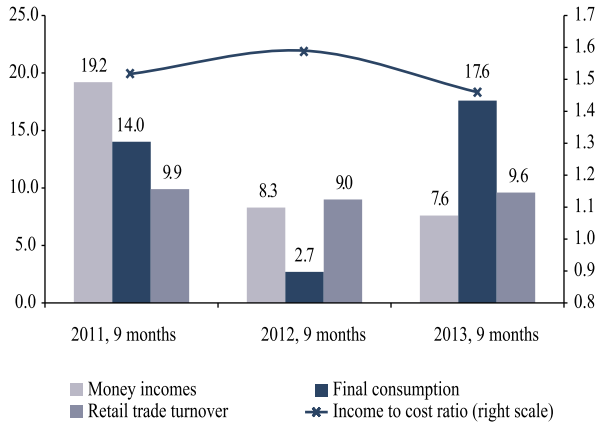


Source: CBA

Y.o.y increase in net income of the population was 7.5% and made up AZN23.1 billion. The income to expenses coverage ratio of the population remained stable compared to the relevant period of the previous year.

Increasing income contributed to growth in retail trade turnover as well. Y.o.y increase in overall retail turnover was 9.6%.

Chart 16. Income and expenditure dynamics of the population, %



Source: SSC

In January-September of 2013 retail trade turnover rose by 1% on food products (9 months, 2012 – 1.5%), and on non-food products by 21.3% (9 months, 2012 – 20.6%). Off-free services to the population grew by 7.2%. In September, 2013 a survey called "*Financial behavior, intentions and inflation expectations of households*" was conducted among 4250 households (families) in order to calculate the Consumer Confidence Index in the country. The survey involved respondents across the country who were classified in terms of income level, occupation, work regime, education, age, and gender. The **Consumer Confidence** defined on expectations of households was observed at a substantially high level internationally. The survey findings show that households highly evaluated *the overall economic state* of the country as a result of which the financial state of families improved over the past 12 months. Results of the *financial behavior and intentions* survey conducted among households for the first time demonstrate an optimistic outlook for middle-term expectations and a positive consumer behavior.

According to the RSM by the CBA, commodity stock diminished in trade and industry in the first 9 months of 2013 followed by new orders. The actual production index was growth-oriented in January-September (8.7 p.p. on average, y.o.y. 5.13%) which displayed a positive trend from the early year. In general, over the first 9 months of the current year average business activity index was 1.4 p.p. higher against the same period of the previous year.

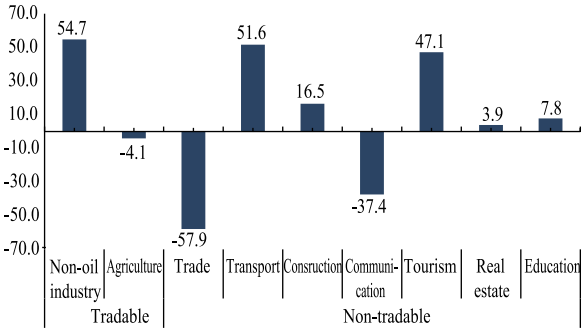
The business confidence index (BCI) reflecting sectoral conjuncture shifts had a stable trend in September as well. *The business Activity Index* measured on durables (primary automobile market, furniture sales, and household electrical appliances, etc.) increased in September, 2013. The result of three quarters of the current year exceeded the previous year's indicator approximately twice as much.

The average monthly salary in the country increased by 6.8% nominally, and 4.5% in real terms, and made up USD 413.8. Y.o.y salary increase was 10.1% in the oil sector, 6.9% in the non-oil sector, 2.1% in the public sector, and 10.6% in the private sector. Increased consumer loans also had an upward impact on domestic demand.

Government expenditures. Government's consumption expenditures chiefly include expenses on goods and services from the state budget. In January-August, 45.6% of budget expenditures was channeled to economic growth, 10.2% to social expenses, and 10.1% to education and healthcare.

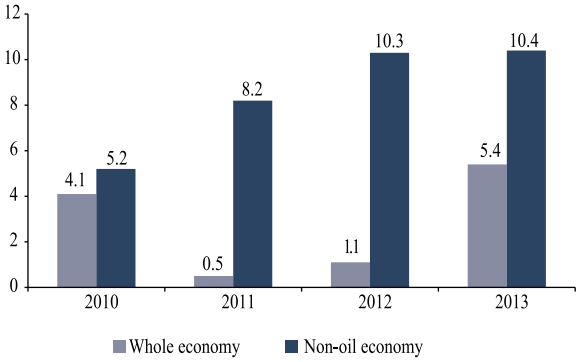
Investment expenditures. In the first 9 months of 2013 total investments to the economy increased 19% and constituted AZN11.8 billion, equal to 27.7% of GDP. It included 16.4% increase in investments to the non-oil sector. The share of investments to the non-oil sector in total investments was 66.9%. Investments in construction increased by 16.5%, in transportation by 51.6%, in healthcare 2.4 times as much. In total, investments in trade rose by 36.9%, non-trade by 11.1%.

Chart 17. Increase in investments on sectors of economy over 9 months of 2013, y.o.y %



Source: SSC

Chart 19. Economic growth, January-September, %



Source: SSC

71.5% of the funds channeled to fixed capital stemmed from domestic sources, 28.5% from foreign sources. The share of budget funds in financing investments increased.

As shown in the chart below, in January-September all segments of the non-oil sector posted growth. The highest growth rate among the segments was in construction, hotels and restaurants and catering, communication and trade. The share of construction sector in 10.4% annual growth in the non-oil economy is two-third or 6.4p.p. The growth of non-oil industry mainly sourced from food industry, machinery, construction materials production and furniture industry. The high growth rate in agriculture owes to both crop sector and livestock. Of services the highest growth was observed in catering and trade.

Chart 18. Financial sources of investments, %

Source: SSC

As shown in the chart, 40.3% of investments sourced from businesses and organizations, 48% from budget.

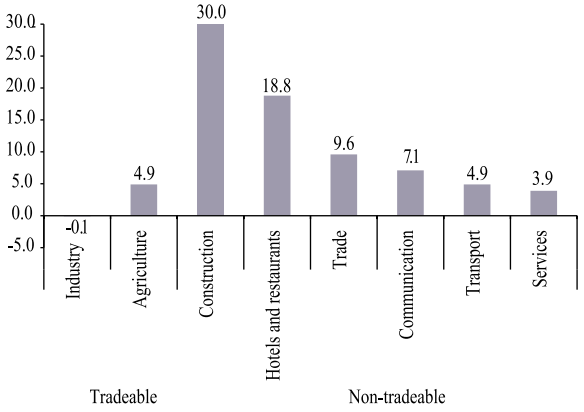
1.2.3. Aggregate supply

In the first 9 months of the current year GDP rose by 5.4% in real terms and nominally constituted AZN42.7 billion. Over the reporting period the non-oil sector grew by 10.4%. Overall, the two third of the value added falls to the share of production, and one third – to services.

Economic growth. GDP growth was driven by the non-oil sector over the period. Thus, 56 percent of GDP fell to the share of the non-oil sector which made 6 p.p. contribution to overall growth.

Crude oil production remained almost unchanged, 1173 kg gold and 531 kg silver were extracted during the reporting period. In total, excluding the oil industry, the trade sector grew by 3.6%. The non-trade sector increased by 12.8%.

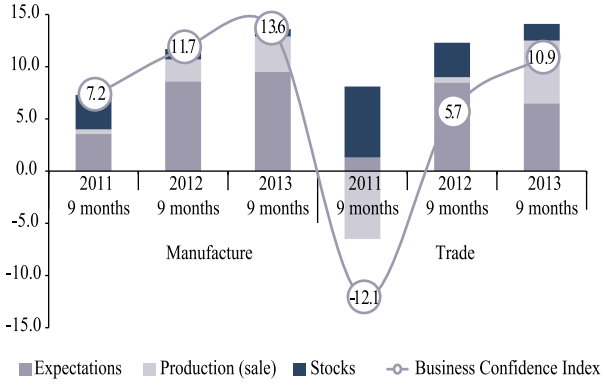
Chart 20. Non-oil economic growth, January-September, %



Source: SSC

Economic growth expectations. According to the Real Sector Monitoring (RSM) conducted by the CBA, the Business Confidence Index[5] (BCI) improved over the first 9 months of 2013 due to high industrial production and trade sales. At the same time, the monitoring also displays optimistic economic activity expectations.

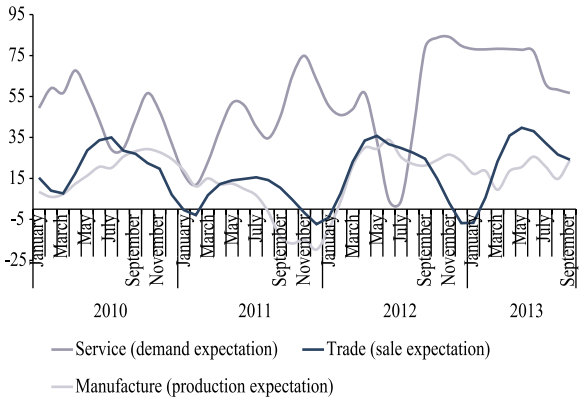
Chart 21. Business Confidence Index, %



Source: CBA estimates

Thus, according to the RSM findings, since early year the demand expectation index on services and the sale expectation index on trade have been prone to growing. Positive expectations were also observed in food, construction materials production and weaving sub-sections of the industry, and furniture and electric appliances segment of trade. Such positive expectations resulted in decrease of stocks. In total results of the RSM conducted by the CBA in recent months demonstrate increase in the number of enterprises with incremental production and risen growth and sustainability of this growth.

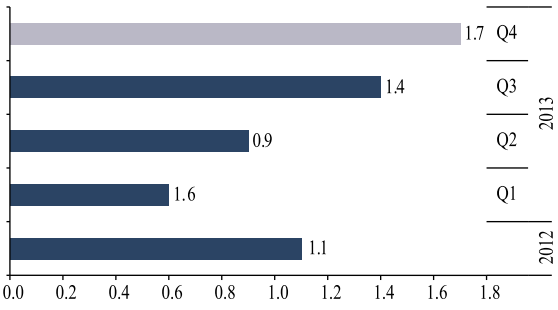
Chart 22. Expectations



Source: CBA
Note: Three-month moving average was used to smooth out fluctuations, as monitoring findings are likely to be exposed to seasonal adjustments.

According to expectations of the Government, the CBA, as well as international organizations, economic growth in the country is expected to continue. The IMF and the Asian Development Bank in their recent economic outlooks respectively forecast 3.5% and 3.1% economic growth in Azerbaijan in 2013.

Chart 23. Output gap, to previous quarter, %



Source: CBA

Note: Light color shows forecasts

According to estimates by the CBA, as a result of high internal demand the output gap will continue to rise above the +0.9% level of

[5] Industrial Business Confidence Index = (production – product stock + production expectation)
Trade Business Confidence Index = (actual sale – product stock + sale expectation)

the first half of the year and be positively zoned in 2013.

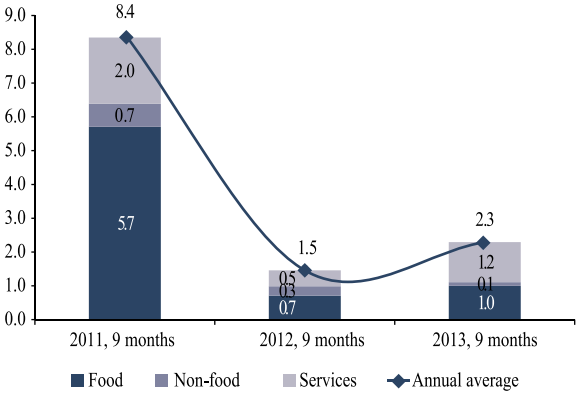
1.2.4. Inflation processes

In the first 9 months of 2013 prices remained stable and inflation was maintained within the forecasts.

1.2.4.1. Consumer Price Index (CPI). In the first 9 months of 2013 average annual inflation was 2.3%. In September prices rose by 0.2% compared to the early year, y.o.y.b 2.7%.

Higher price increase in annual terms was observed in food products and services over the period. Thus, non-food prices rose by 0.6%, food prices by 2.5% and service prices by 3.6%. Such a price rise in services is due to price hike in tariffs of air transportation and notarial services in January.

Chart 24. Annual average inflation, %

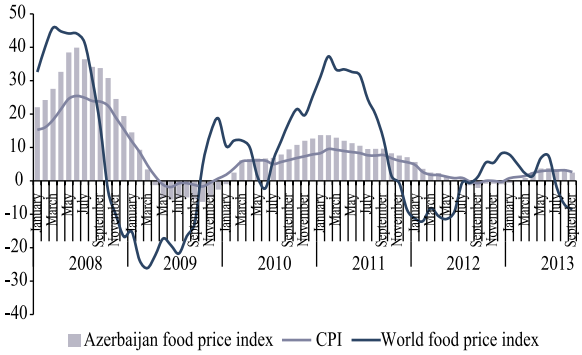


Source: CBA estimates on the basis of SSC data

Estimates suggest that 1 p.p. of 2.3% average annual inflation relates to rise in food products, 0.1 p.p. in non-food products and 1.2 p.p. in services. Seemingly, the share of services in average annual inflation was high enough over the first 9 months of the current year.

While the world food prices increased over the first half of the current year, a decrease was observed over Q3 (Chart 25). If the world food prices continue to drop, import inflation may also decrease.

Chart 25. Azerbaijan and world food CPI (year on year, %)

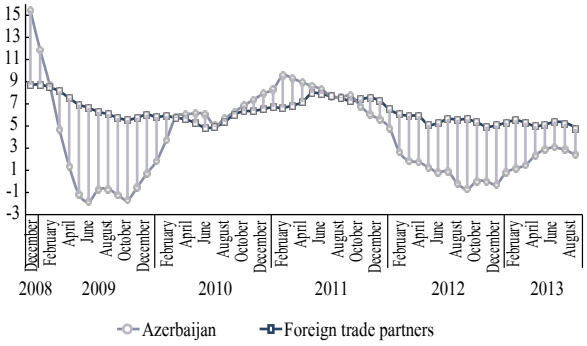


Source: CBA estimates on the basis of SSC and IMF data

While average the annual core price index, adjusted from swings in prices for commodities regulated by the government and seasonal factors increased by 0.6%, prices decreased by 0.4% compared to the beginning of the year. Thus, in the first 9 months of 2013 transportation and postal tariff indices decreased by 0.4% on average annual. Cargo transportation tariffs decreased by 0.6%, passenger transportation tariffs by 0.4%. Besides, communication tariff indices increased by 2.9%, and postal and courier tariff indices by 0.9%.

In 2013 inflation in foreign trade partner DDCs was 1.2%, in DGCs 7%, and in oil-exporting countries 9 percent. In total, average inflation in trade partners was 4.7%, which exceeds the annual inflation in Azerbaijan by 2 p.p.. Note that, domestic inflation has been lower than in foreign trade partner countries over the last 8 quarters (Chart 26).

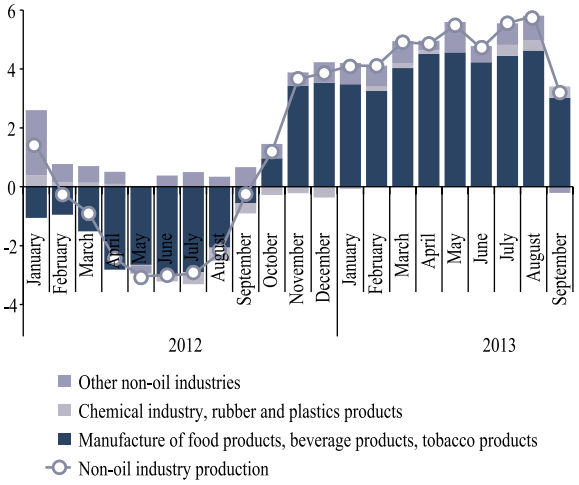
Chart 26. Inflation (y.o.y, %)



Source: SSC, CBA estimates

1.2.4.2. Industrial Producer Price Index (IPPI). In the first 9 months of 2013 annual average IPPI declined by 4.6% due to 6.3% price downswing in the crude oil and natural gas extraction industry. Prices of non-oil industrial products grew by 4.7% over the quarter due primarily to price upswings of 9.2% in chemistry, 8.1% in metallurgy, and 7.4% in final metal production. However, prices decreased by 1.7% on machinery and equipment manufacturing, 8.9% on paper and cardboard, and 2.8% on tobacco.

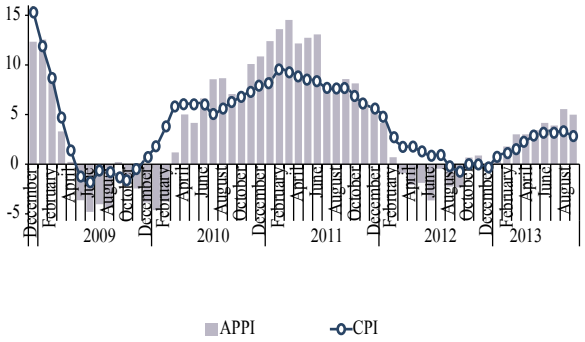
Chart 27. Non-oil producer price index (y.o.y.%)



Source: SSC, CBA estimates

1.2.4.3. Agricultural Producer Price Index (APPI). In the first 9 months of 2013 the APPI increased on average annual 3.5%. Increase on price dynamics was due to rise on annual plants (4.6%) and livestock products (3.6%). 1.9% price downswing was observed in perennials.

Chart 28. Agriculture Price Index (y.o.y. %)

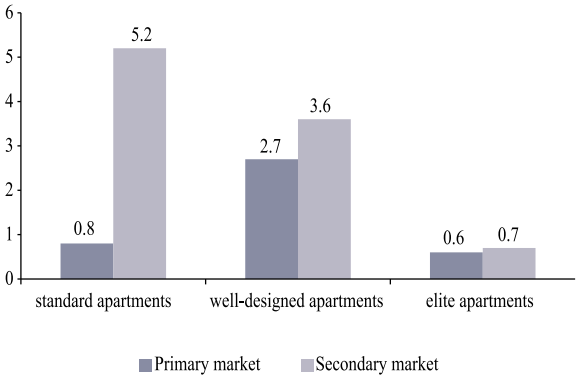


Source: SSC

As shown in chart 28, while the APPI is more volatile than the CPI, they display the same change trajectory. In the first 9 months of 2013 prices increased on both indices, and change in the APPI exceeded total inflation 3.3 p.p., the reason for which is the low pass-through capacity of price changes in agricultural products to total prices.

1.2.4.4. Real Estate Prices. According to the SSC, in the first 9 months of 2013 prices in the housing market increased by 3.6% versus the relevant period of the previous year. Secondary and primary markets respectively grew by 3.6% and 1%. Highest price hike in the secondary market was observed in standard apartments (5.2%), and in the primary market in well-designed apartments (2.7%) (Chart 29). According to the "MBA LTD" Appraisal and Consulting Company, while rent fees in residential property decreased by 3.2%, fees increased in commercial real estate by 1.2 over the period.

Chart 29. Price changes in real estate market, %



Source: SSC

Ongoing mortgage lending factored in the activity in the real estate market, particularly the secondary market over the period. In the first 9 months of 2013 banks issued AZN81.5 million worth mortgage loans.

1.2.4.5. Inflation expectations. Regular RSM by the CBA suggests that a decrease was observed in price expectations on all sectors

Box 4. Nominal GDP targeting: advantages and disadvantages

Nominal GDP targeting is analogous to inflation targeting. Limited monetary policy possibilities on the backdrop of post-crisis lower refinancing rate (zero bound), Japan's failure to get rid of deflation line for years, etc. have enabled the nominal GDP targeting regime to emerge as an alternative. In academic circles, *market monetarists*[6] are major supporters of this idea whose opinions are based on concepts of rational expectations, the quantity theory of money and sticky wages. Supporters of the alternative regime put forward their arguments primarily on expansion of the impact and possibilities of monetary policy. However, opponents express their doubts and hesitations on application of the regime.

Key advantages of nominal GDP targeting:

- *The regime enables combination of two targets* – real economic growth and the general price level in the economy;
- *Simplicity of targeting* – if a central bank (CB) sets the nominal GDP target of 3.5 percent, and if real economic growth equals to 2.5%, the inflation target should be 1 percent so that the CB could achieve its nominal GDP target in the end. This is simple and clear for both the operation framework of the regime and economic agents;
- *Simplicity of decision-making when facing a dilemma* – because of increase in global oil prices, the economy witnesses a decline in GDP on the one hand, and price hikes on the other, the CB may escape the dilemma equally prioritizing both targets within the nominal GDP target set;
- *Development of rule-based monetary policy framework of the regime* – nominal GDP targeting framework allows to formulate a monetary policy rule. The rule-based versus discretion based monetary policy makes communication easier;
- *Solution to the chronic activity challenge* – low level of nominal GDP targeting may be a significant problem-causing factor for companies, indeed. Thus, a decrease in the nominal GDP in case of an unparalleled decline in expenses exerts pressure on businesses' turnover, and return after all, thus leading to bankruptcy of those businesses sooner or later.

Key disadvantages of nominal GDP targeting:

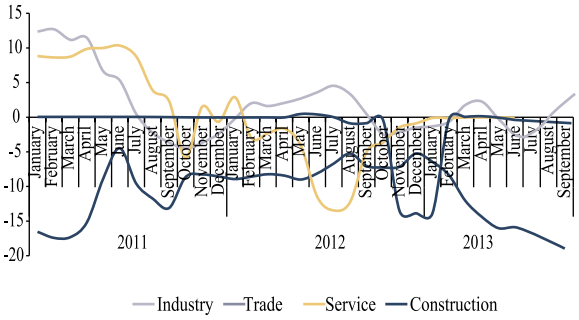
- *Unawareness on how the CB achieved the target within the regime* – correlation between nominal GDP and policy tools, and out of this, issues such as defining the key policy tool need to be deeply studied;
- *Some statistical issues hamper introduction of the regime* – statistical data are delivered with some delays, with some changes thereafter, etc.;
- *The regime manifests itself differently in expansion and slump phases of the economic cycle* – The nominal GDP targeting regime will require more monetary incentives during the crisis, while substantial austerity measures will be needed to end the accommodative monetary policy of the crisis period. Consequently, the regime may be characterized by a "recession launch" feature throughout the entire cycle;
- *Unawareness on when policy responses are made* – One case is that the CB takes its policy decision after the information on the nominal GDP and its components is disclosed. In another case the CB forecasts the nominal GDP and its components, follows the relevant trend and makes policy changes if any target deviations in the policy horizon are revealed (lagged adjustment, forecast adjustment). The first case may not result as expected due to the fact that companies invest in advance, the economy grows against additional capitalization. A policy decision may therefore show its effect on the economy only after a while. The second case does not work this way and the key issue here is that if the error made during short-run forecasting of the GDP is significant, efficiency of the policy decision declines substantially.

Source:
Frankel J. (2012), Is it time for nominal GDP targets?
http://www.guardian.co.uk/business/economics-blog/2012/dec/17/nominal-gdp-targets-bank-england
Todd E. Clark, Nominal GDP Targeting Rules: Can They Stabilize the Economy?, Federal Reserve Bank of Kansas 1995.

[6] http://en.wikipedia.org/wiki/Market_monetarism

(industry, service and trade), except for trade in the first nine months of 2013. Prices are expected to decline more in the trade sector.

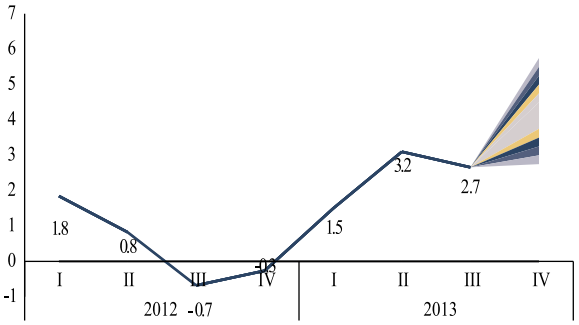
Chart 30. Price expectation indecies (3 months moving average)



Source: CBA

According to the recent release by the IMF, annual average inflation in Azerbaijan in 2013 is projected to be 3.7%, 2.8 p.p. lower than in CIS countries, 0.4 p.p. lower than in CEE countries, and in total 2.5 p.p. lower than in DGCs.

Chart 31. Inflaion forecast (y.o.y, %)



Source: CBA

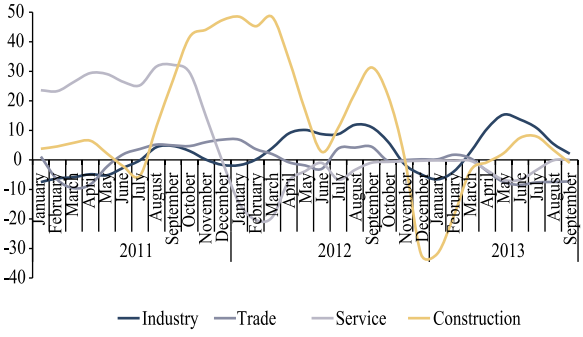
According to the CBA's model estimates, inflation as of the yearend is forecast to be within the target set in the CBA statement on key directions of the monetary and financial stability policy. The ARIMA (Autoregressive Integrated Moving Average) model was used in estimation. Inflation changes were identified with some probability with various scenarios through this model.

1.2.5. Employment

As of the end-Q3, 2013 the economically active population was numbering 4742.5 thousand persons, 95% of which was engaged in various segments of the economy and the social sector. According to the SSC, as of the end-August the number of hired labor was 1491.9 thousand persons, 8% higher against the relevant period of the previous year. 97.5% of hired workers were engaged in the non-oil sector, while 2.5% in the oil sector.

The CBA monitoring in up to 300 enterprises within the RSM framework also demonstrates high employment.

Chart 32. Employment expectation index (3 months moving average)



Source: CBA

As shown in the chart, employment on the industry and service sectors is likely to increase in upcoming 3 months.

Box 5. Inflation forecasting through models

The CBA is forecasting inflation using various econometric models. Forecasts are based upon macroeconomic fundamentals that define price changes and volatility through the VAR (Vector Auto Regression) model.

Also, price shifts are estimated through *Financial Programming* based upon macroeconomic indicators covering 4 major sectors (Real, Fiscal, External, and Monetary) of the economy.

Additionally, given behavior of participants of the economy, the DSGE (Dynamic Stochastic General Equilibrium) model is being developed in order to identify the reasons for price swings. Thus, in the DSGE model, equilibrium level of endogenous fundamentals (real economic growth, REER, inflation, capital, investments, wages, foreign trade and interest rates, consumption, etc.) is defined on the basis of agents' behavior on the microeconomic level.

II. MONETARY AND EXCHANGE RATE POLICY

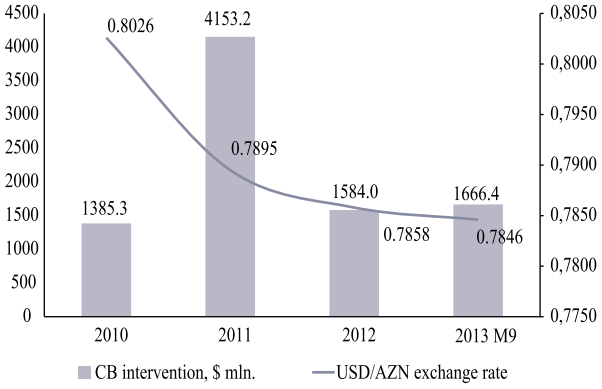
2.1. FX market and the exchange rate of manat

In the first 9 months of 2013 the exchange rate policy targeted balancing between demand and supply in the FX market and a stable exchange rate of manat against USD.

In the reporting period the CBA pursued its exchange rate policy within a corridor, targeting the bilateral exchange rate of USD/ AZN.

Amid huge surplus in the balance of payments supply prevailed over demand in the FX market. However, to prevent considerable strengthening of the exchange rate and neutralize negative impacts on competitiveness of the non-oil sector the CBA sterilized USD1.67 billion worth currency over the period.

Chart 33. CBA intervention to FX market, USD million



Source: CBA

The exchange rate of manat against USD remained almost unchanged and strengthened 0.06 percent over the quarter. Exchange rate stability of the national currency had a positive impact on macroeconomic environment and financial sector stability in the country.

Table 3. Bilateral nominal and real exchange rate indices of manat in the first 9 months of 2013, %

	Comparing to December 2012	
	Nominal bilateral exchange rate index*	Real bilateral exchange rate index*
US	100.0	99.1
Euro area	98.3	97.7
Great Britain	101.9	100.6
Turkey	112.9	107.7
Russia	106.1	101.6
Ukraine	100.7	102.2
Georgia	100.1	101.4
Iran	201.6	160.7
Kazakhstan	101.9	98.8
Japan	118.5	117.3
Israel	94.4	92.9
China	98.2	98.1
Belarus	105.6	96.2
S. Korea	100.8	99.0
Switzerland	100.3	101.7

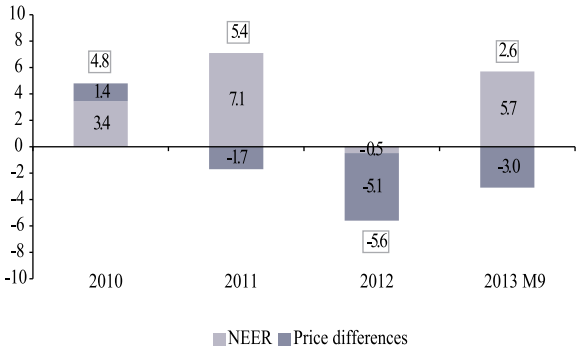
**Average monthly change of exchange rates of manat against currencies of trade partners.*

Source: CBA

Dynamics of the nominal bilateral exchange rate of manat contributed to swings in real bilateral exchange rates. Manat strengthened both in nominal and real terms against the national currencies of Great Britain, Turkey, Russia, Ukraine, Georgia, Iran and Japan.

In the first 9 months of 2013 the NEER (on gross trade turnover) on the non-oil sector grew by 5.7%. According to model estimates[7], 1% strengthening of NEER reduces consumer prices 0.3%.

Chart 34. Structure of REER, %



Source: CBA

Inflation differences had a downward impact on the REER. Eventually the REER on the non-oil sector strengthened only 2.6% over the first half of 2013.

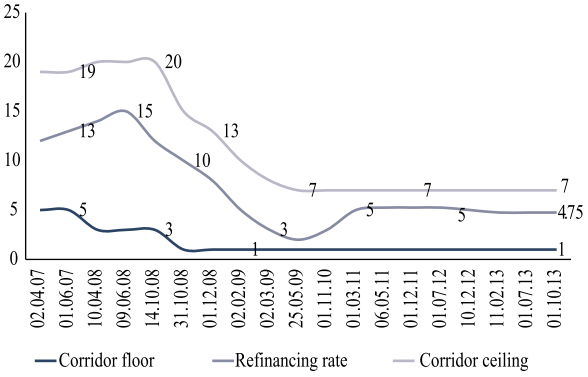
2.2. Monetary policy tools

In the first 9 months of 2013 the Bank applied the monetary policy tools arsenal allowing for economic growth dynamics, inflation expectations and specifics of the pass-through capacity of the monetary policy to aggregate demand and prices.

The key goal of the monetary policy was to control inflationary factors and their regulation in a preventive mode within the established target over the period.

To allow further drop in interest rates given the inflation target and consequently support economic growth in the non-oil sector the CBA decided to shift the refinancing rate from 5% to 4.75%, and leave other parameters of the interest rate corridor unaltered at the beginning of the year.

Chart 35. Parameters of interest rate corridor, %

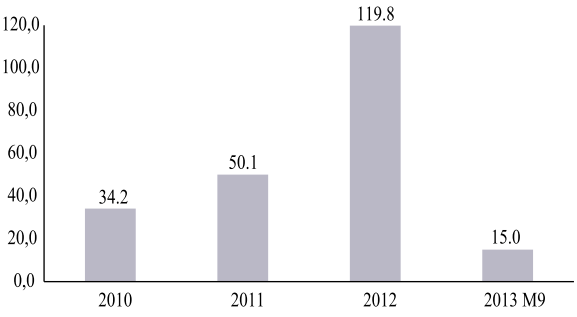


Source: CBA

Interest rates declined over the period. The CBA's monetary policy decisions factored in changes to interest rates in the banking sector.

Open market operations and reserve requirements were regularly employed to adjust growth rates of money supply and the liquidity level in the banking system. In the first 9 months of 2013 AZN1.1 billion worth notes were issued within sterilization operations, out of which AZN279 million worth notes were auctioned and placed.

Chart 36. Central Bank notes, AZN million



Source: CBA

Average yield on notes in recent auction constituted 1.13%, which was 1.87% in the early year. Notes in circulation made up AZN15 million, REPO operations AZN48 million as of 01.10.2013.

[7] Calculations are based on the result of the VAR (Vector Autoregressive) model.

Box 6. Shock from Graying: Is the Demographic Shift Weakening Monetary Policy Effectiveness?

The IMF study has revealed a downward effect of demographic shift on monetary policy transmission. The study suggests that, unlike the young, the old society is not sensitive to monetary policy changes. To that end, the study investigates effects of monetary transmission channels in young and old societies.

The findings display that a graying society exerts a negative long-run impact on the effectiveness of the monetary policy. All else being equal, a one point increase in the old-age ratio lowers the impact of the monetary policy on inflation and unemployment by 0.10 percentage points and 0.35 percentage points, respectively.

Effects of Monetary transmission channels in young and old societies

	Young Society	Old Society	Rationale
Interest Rate Channel	More Important	Less Important	Young adults need more credit than older ones
Credit Channel	More Important	Less Important	Young adults have higher external risk premium
Wealth Effect	Less Important	More Important	The young possess little wealth while the old own much of it, making the latter more sensitive to monetary policy changes
Risk Taking Channel	More Important	Less Important	Older adults are more risk averse, reacting less to changes in monetary policy
Expectation Channel	Less Important	More Important	Inflation Expectations: Older adults more sensitive to inflation than the younger ones
Exchange Rate	Not Clear	Not Clear	Not Clear

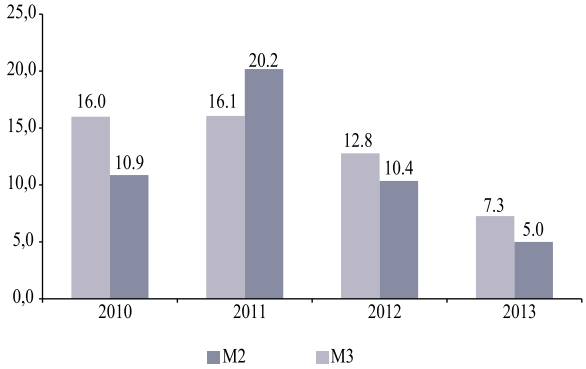
Source:
Patrick Imam. Shock from Graying: Is the Demographic Shift Weakening Monetary Policy Effectiveness? IMF Working Paper. September 2013.

2.3. Money supply

In the first 9 months of 2013 broad money supply kept pace with the demand of the economy, the structure of which continued to improve.

As shown in the chart below, broad money supply in manat grew by 7.3% over the period. The money multiplier of the banking system demonstrated an incremental trend (6.3% increase versus the early year) due to cashless money extension.

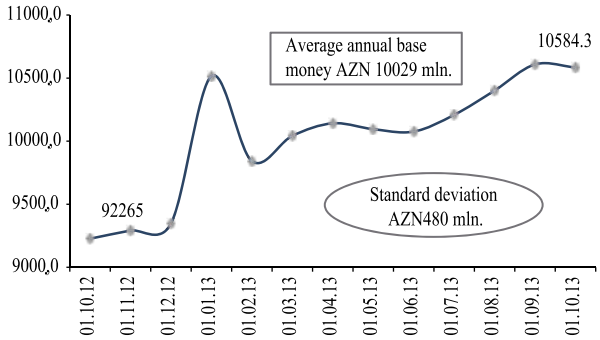
Chart 37. Changes in money supply in 9 months, %



Source: CBA

Money base in manat increased by 0.7% and made up AZN10.6 billion over the period. Dynamics of money supply was not strongly volatile.

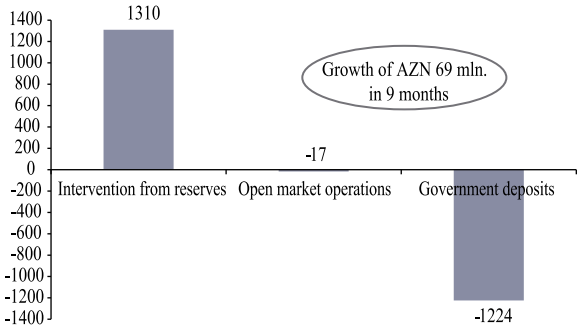
Chart 38. Base money, AZN million



Source: CBA

Whereas high total government deposits had a downward effect on money base over the reporting period, the growth rate of money base was positive due to higher currency intervention.

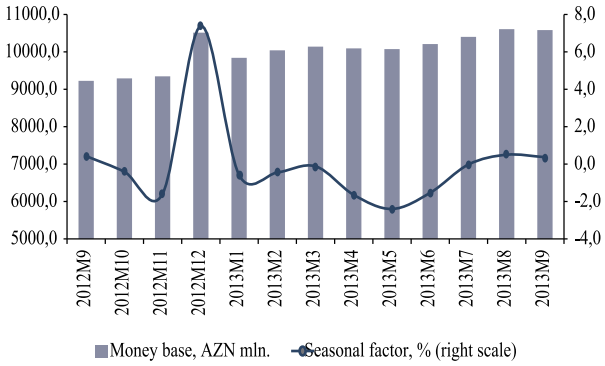
Chart 39. Changing factors of base money, AZN million



Source: CBA

As shown in the chart below, seasonally adjusted money base increased by 8.3% versus the early year, y.o.y. 14.8%.

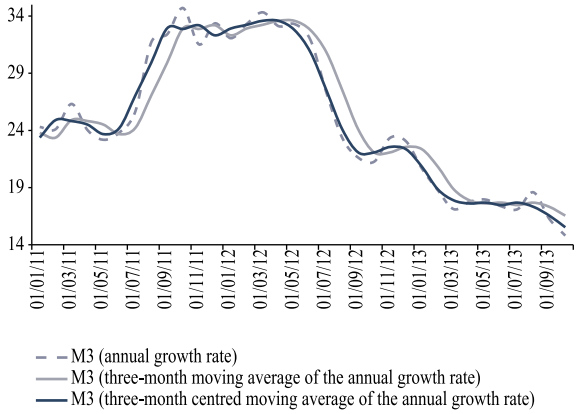
Chart 40. Effect of seasonal factors on base money



Source: CBA

As of 01.10.2013 broad money supply (M3) increased by 5% against the early year, y.o.y. 14.8% and reached AZN17613.1 million.

Chart 41. Dynamics of M3 money supply, %



Source: CBA

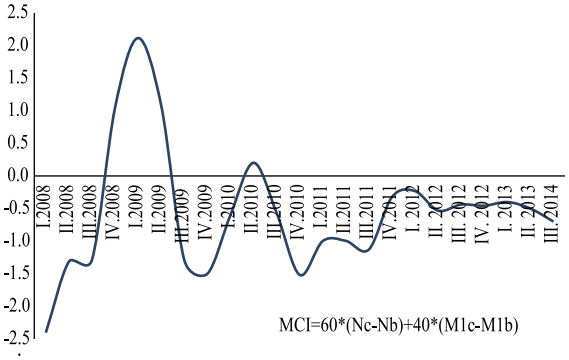
Dollarization indicators continue to drop. The share of deposits in foreign currency in total savings and deposits decreased by 7 p.p. and constituted 34.8%. The share of deposits in foreign currency in M3 money supply decreased by 3.2 p.p. and made up 15.9%. Besides, savings and deposits in hard currency decreased by 5.6%, while those in the national currency increased by 15.4% against the early year.

Table 4. Monetary aggregates, AZN million

	01.01.11	01.01.12	01.01.13	01.10.13
M0 (Cash)	5455.8	7158.2	9256.6	9560
M1 (Cash, demand savings and deposits)	6718.9	8824.8	11107.9	11736.8
M2 (Cash, demand and term savings and deposits, in AZN)	8297.5	10997.2	13806.4	14809.6
M3 (Cash, demand and term savings and deposits, in AZN and hard currency)	10527.5	13903.2	16775.3	17613.1

Source: CBA

Chart 42. Monetary Condition Index



Source: CBA

Non-cash money supply grew by 7.1% over the 9 months of the current year, y.o.y. 14.6%.

Over the year slight appreciation of the NEER of manat and stable money supply had an overall easing effect on the Monetary Condition Index (MCI)[8].

[8] MCI – an indicator charactarizing average change of money supply and NEER taking their share into account.

Charts and tables used

Charts

Tables

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